STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/937,779A
Source: TFW16
Date Processed by STIC: 11/18/2005

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE **CHECKER VERSION 4.2.2 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<**http://www.uspto.gov/ebc/efs/downloads/documents.htm**> , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):** U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 09/937,779 A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1	Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3: this will prevent "wrapping."
2	Invalid Line Length	The rules require that a line **not exceed** 72 characters in length. This includes white spaces.
3	Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers: use **space characters**, instead.
4	Non-ASCII	The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**
5	Variable Length	Sequence(s)____contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6	PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
7	Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for **each** skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.
8	Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If **intentional**, please insert the following lines for **each** skipped sequence. <210> sequence id number <400> sequence id number 000
9	Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents.
10	Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence
11	Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12	PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13	Misuse of n/Xaa	"n" can **only** represent a single nucleotide; "Xaa" can **only** represent a single amino acid

IFW16

RAW SEQUENCE LISTING DATE: 11/18/2005
PATENT APPLICATION: **US/09/937,779A** TIME: 10:08:48

Input Set : **N:\RJAVED\09937779.txt**
Output Set: **N:\CRF4\11182005\I937779A.raw**

Does Not Comply
Corrected Diskette Needed
(pg - 1—17)

3 <110> APPLICANT: Dahlqvist, Anders
4 Stahl, Ulf
5 Lenman, Marit
6 Banas, Antoni
7 Ronne, Hans
8 Stymne, Sten
10 <120> TITLE OF INVENTION: PROCESSES FOR PRODUCING TRIACYLGLYCEROL USING GENES THAT ENCODE
11 PHOSPHOLIPID:DIACYLGLYCEROL ACYLTRANSFERASES
13 <130> FILE REFERENCE: BASFnae337799PCT1-15
15 <140> CURRENT APPLICATION NUMBER: US 09/937779A
C--> 17 **<141> CURRENT FILING DATE: 2002-07-02**
17 <150> PRIOR APPLICATION NUMBER: PCT / EP 00 / 02701
18 <151> PRIOR FILING DATE: 2000-03-23
20 <160> NUMBER OF SEQ ID NOS: 32
22 <170> SOFTWARE: PatentIn Ver. 3.3

ERRORED SEQUENCES

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RAW SEQUENCE LISTING DATE: 11/18/2005
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RAW SEQUENCE LISTING DATE: 11/18/2005
PATENT APPLICATION: US/09/937,779A TIME: 10:08:48

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Same type of Error as previous pages See page-4

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PATENT APPLICATION: **US/09/937,779A** TIME: 10:08:48

Input Set : **N:\RJAVED\09937779.txt**
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→ See page 17 for Error Explanation

Same Error, See page 5

RAW SEQUENCE LISTING DATE: 11/18/2005
PATENT APPLICATION: **US/09/937,779A** TIME: 10:08:48

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     667 gag gac gtc atc aga ata gct gct ggg gca acc ggt gag gaa att ggt   288
     668 Glu Asp Val Ile Arg Ile Ala Ala Gly Ala Thr Gly Glu Glu Ile Gly
     669                  85                  90                  95
     671 ggc gat cag gtt tat tca gat ata ttc aag tgg tca gag aaa atc aaa   336
     672 Gly Asp Gln Val Tyr Ser Asp Ile Phe Lys Trp Ser Glu Lys Ile Lys
     673             100                 105                 110
     675 ttg aaa ttg taa cct atg gga agt taa aga agt gcc gac ccg ttt att   384
     676 Leu Lys Leu
     677         115
     679 gcg ttc caa agt gtc ctg cctgagtgca actctggatt ttgcttaaat          432
     681 attgtaattt ttcacgcttc attcgtccct ttgtcaaatt tacatttgac aggacgccaa 492
     683 tgcgatacga tgttgtaccg ctattttcag cattgtatat taaactgtac aggtgtaagt 552
W--> 685 tgcatttgcc agctgaaatt gtgtagtcgt tttctttacg atttaatatc aagtggcgga 612
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     727 aaatgaagag atacaatcct gcgggctcaa aaataaccgt ggtcgagatg ccgcatgaac 360
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Same Error → See page 17

Same Error

RAW SEQUENCE LISTING DATE: 11/18/2005
PATENT APPLICATION: US/09/937,779A TIME: 10:08:48

Input Set : N:\RJAVED\09937779.txt
Output Set: N:\CRF4\11182005\I937779A.raw

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Same Error

RAW SEQUENCE LISTING DATE: 11/18/2005
PATENT APPLICATION: US/09/937,779A TIME: 10:08:48

Input Set : N:\RJAVED\09937779.txt
Output Set: N:\CRF4\11182005\I937779A.raw

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Same Error

RAW SEQUENCE LISTING DATE: 11/18/2005
PATENT APPLICATION: **US/09/937,779A** TIME: 10:08:48

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Output Set: **N:\CRF4\11182005\I937779A.raw**

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same Error

RAW SEQUENCE LISTING DATE: 11/18/2005
PATENT APPLICATION: **US/09/937,779A** TIME: 10:08:48

Input Set : **N:\RJAVED\09937779.txt**
Output Set: **N:\CRF4\11182005\I937779A.raw**

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2211 taacatttgt catactgtct tttggagggc attgaatttt gctatggaaa gcgctggagc 2160
2212 ttccatgctt gcattcttta ccaattagcg ttattctgct tctttcaatt ttcttgtata 2220
2213 tgcatctatg gtcttttatt tcttcttaat taaagactcg ttggattagt tgctctatta 2280

RAW SEQUENCE LISTING DATE: 11/18/2005
PATENT APPLICATION: **US/09/937,779A** TIME: 10:08:48

Input Set : **N:\RJAVED\09937779.txt**
Output Set: **N:\CRF4\11182005\I937779A.raw**

```
     2214 gtcacttggt tccttaatat agaactttac tttcttcgaa aattgcagag cgattgcccc 2340
     2215 aggattctta gacaccgata tatttagact tcagaccttg cagcatgtaa tgagaatgac 2400
     2216 acgcacatgg gactcaacaa tgtctatgtt accgaaggga ggtgacacga tatggggcgg 2460
     2217 gcttgattgg tcaccggaga aaggccacac ctgttgtggg aaaaagcaaa agaacaacga 2520
     2218 aacttgtggt gaagcaggtg aaaacggagt ttccaagaaa agtcctgtta actatggaag 2580
     2219 gatgatatct tttgggaaag aagtagcaga ggctgcgcca tctgagatta ataatattga 2640
     2220 ttttcgagta aggacatata aatcataata aaccttgtac attttgtgat tgtatgatga 2700
     2221 atatctgtac attttatctg gtgaagggtg ctgtcaaagg tcagagtatc ccaaatcaca 2760
     2222 cctgtcgtga cgtgtggaca gagtaccatg acatgggaat tgctgggatc aaagctatcg 2820
     2223 ctgagtataa ggtctacact gctggtgaag ctatagatct actacattat gttgctccta 2880
     2224 agatgatggc gcgtggtgcc gctcatttct cttatggaat tgctgatgat ttggatgaca 2940
     2225 ccaagtatca agatcccaaa tactggtcaa atccgttaga gacaaagtaa gtgatttctt 3000
     2226 gattccaact gtatccttcg tcctgatgca ttatcagtct ttttgttttc ggtcttgttg 3060
     2227 gatatggttt tcagctcaaa gcttacaaag ctgtttctga gcctttctca aaaaggcttg 3120
     2228 ctcagtaata ttgaggtgct aaagttgata catgtgactc ttgcttataa atcctccgtt 3180
     2229 tggtttgttc tgctttttca gattaccgaa tgctcctgag atggaaatct actcattata 3240
     2230 cggagtgggg ataccaacgg aacgagcata cgtatacaag cttaaccagt ctcccgacag 3300
     2231 ttgcatcccc tttcagatat tcacttctgc tcacgaggag gacgaagata gctgtctgaa 3360
     2232 agcaggagtt tacaatgtgg atggggatga aacagtaccc gtcctaagtg ccgggtacat 3420
     2233 gtgtgcaaaa gcgtggcgtg gcaagacaag attcaaccct tccggaatca agacttatat 3480
     2234 aagagaatac aatcactctc cgccggctaa cctgttggaa gggcgcggga cgcagagtgg 3540
     2235 tgcccatgtt gatatcatgg gaaactttgc tttgatcgaa gatatcatga gggttgccgc 3600
     2236 cggaggtaac gggtctgata taggacatga ccaggtccac tctggcatat ttgaatggtc 3660
     2237 ggagcgtatt gacctgaagc tgtga                                     3685
     2240 <210> SEQ ID NO: 25
     2241 <211> LENGTH: 402
E--> 2242 <212> TYPE: cDNA
     2243 <213> ORGANISM: Arabidopsis thaliana
     2245 <220> FEATURE:
     2246 <221> NAME/KEY: CDS
     2247 <222> LOCATION: (120)..(401)
     2249 <400> SEQUENCE: 25
     2250 agaaacagct ctttgtctct ctcgactgat ctaacaatcc ctaatctgtg ttctaaattc 60
     2252 ctggacgaga tttgacaaag tccgtatagc ttaacctggt ttaatttcaa gtgacagat  119
     2254 atg ccc ctt att cat cgg aaa aag ccg acg gag aaa cca tcg acg ccg   167
     2255 Met Pro Leu Ile His Arg Lys Lys Pro Thr Glu Lys Pro Ser Thr Pro
     2256   1               5                  10                  15
     2258 cca tct gaa gag gtg gtg cac gat gag gat tcg caa aag aaa cca cac   215
     2259 Pro Ser Glu Glu Val Val His Asp Glu Asp Ser Gln Lys Lys Pro His
     2260             20                  25                  30
W--> 2262 gaa tct tcc aaa tcc cac cat aag naa tcg aac gga gga ggg aag tgg   263
W--> 2263 Glu Ser Ser Lys Ser His His Lys Xaa Ser Asn Gly Gly Gly Lys Trp
     2264          35                  40                  45
     2266 tcg tgc atc gat tct tgt tgt tgg ttc att ggg tgt gtg tgt gta acc   311
     2267 Ser Cys Ile Asp Ser Cys Cys Trp Phe Ile Gly Cys Val Cys Val Thr
     2268      50                  55                  60
     2270 tgg tgg ttt ctt ctc ttc ctt tac aac gca atg cct gcg agc ttc cct   359
     2271 Trp Trp Phe Leu Leu Phe Leu Tyr Asn Ala Met Pro Ala Ser Phe Pro
     2272  65                  70                  75                  80
```

Same Error

See page 17

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RAW SEQUENCE LISTING DATE: 11/18/2005
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Input Set : N:\RJAVED\09937779.txt
Output Set: N:\CRF4\11182005\I937779A.raw

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W--> 2274 cag tat gta acg gag ccg aat cac gng tcc ttt gcc tta ccc g 402
W--> 2275 Gln Tyr Val Thr Glu Pro Asn His Xaa Ser Phe Ala Leu Pro
2276 85 90
2279 <210> SEQ ID NO: 26
2280 <211> LENGTH: 643
E--> 2281 <212> TYPE: cDNA
2282 <213> ORGANISM: Zea mays
2284 <220> FEATURE:
2285 <221> NAME/KEY: CDS
2286 <222> LOCATION: (1)..(402)
2288 <400> SEQUENCE: 26
2290 cgg gag aaa ata gct gct ttg aag ggg ggt gtt tac tta gcc gat ggt 48
2291 Arg Glu Lys Ile Ala Ala Leu Lys Gly Gly Val Tyr Leu Ala Asp Gly
2292 1 5 10 15
2294 gat gaa act gtt cca gtt ctt agt gcg ggc tac atg tgt gcg aaa gga 96
2295 Asp Glu Thr Val Pro Val Leu Ser Ala Gly Tyr Met Cys Ala Lys Gly
2296 20 25 30
2298 tgg cgt ggc aaa act cgt ttc agc cct gcc ggc agc aag act tac gtg 144
2299 Trp Arg Gly Lys Thr Arg Phe Ser Pro Ala Gly Ser Lys Thr Tyr Val
2300 35 40 45
2302 aga gaa tac agc cat tcg cca ccc tct act ctc ctg gaa ggc agg ggc 192
2303 Arg Glu Tyr Ser His Ser Pro Pro Ser Thr Leu Leu Glu Gly Arg Gly
2304 50 55 60
2306 acc cag agc ggt gca cat gtt gat ata atg ggg aac ttt gct cta att 240
2307 Thr Gln Ser Gly Ala His Val Asp Ile Met Gly Asn Phe Ala Leu Ile
2308 65 70 75 80
2310 gag gac gtc atc aga ata gct gct ggg gca acc ggt gag gaa att ggt 288
2311 Glu Asp Val Ile Arg Ile Ala Ala Gly Ala Thr Gly Glu Glu Ile Gly
2312 85 90 95
2314 ggc gat cag gtt tat tca gat ata ttc aag tgg tca gag aaa atc aaa 336
2315 Gly Asp Gln Val Tyr Ser Asp Ile Phe Lys Trp Ser Glu Lys Ile Lys
2316 100 105 110
2318 ttg aaa ttg taa cct atg gga agt taa aga agt gcc gac ccg ttt att 384
2319 Leu Lys Leu
2320 115
2322 gcg ttc caa agt gtc ctg cctgagtgca actctggatt ttgcttaaat 432
2324 attgtaattt ttcacgcttc attcgtccct ttgtcaaatt tacatttgac aggacgccaa 492
2326 tgcgatacga tgttgtaccg ctattttcag cattgtatat taaactgtac aggtgtaagt 552
W--> 2328 tgcatttgcc agctgaaatt gtgtagtcgt tttctttacg atttaatanc aagtggcgga 612
W--> 2330 gcagtgcccc aagcnaaaaa aaaaaaaaaa a 643

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2333 <210> SEQ ID NO: 27
2334 <211> LENGTH: 115
2335 <212> TYPE: PRT
2336 <213> ORGANISM: Zea mays
E--> 2338 <400> SEQUENCE: 30
2339 Arg Glu Lys Ile Ala Ala Leu Lys Gly Gly Val Tyr Leu Ala Asp Gly
2340 1 5 10 15
2341 Asp Glu Thr Val Pro Val Leu Ser Ala Gly Tyr Met Cys Ala Lys Gly
2342 20 25 30

RAW SEQUENCE LISTING DATE: 11/18/2005
PATENT APPLICATION: US/09/937,779A TIME: 10:08:48

Input Set : N:\RJAVED\09937779.txt
Output Set: N:\CRF4\11182005\I937779A.raw

```
2343 Trp Arg Gly Lys Thr Arg Phe Ser Pro Ala Gly Ser Lys Thr Tyr Val
2344          35                  40                  45
2345 Arg Glu Tyr Ser His Ser Pro Pro Ser Thr Leu Leu Glu Gly Arg Gly
2346      50                  55                  60
2347 Thr Gln Ser Gly Ala His Val Asp Ile Met Gly Asn Phe Ala Leu Ile
2348  65                  70                  75                  80
2349 Glu Asp Val Ile Arg Ile Ala Ala Gly Ala Thr Gly Glu Glu Ile Gly
2350                  85                  90                  95
2351 Gly Asp Gln Val Tyr Ser Asp Ile Phe Lys Trp Ser Glu Lys Ile Lys
2352             100                 105                 110
2353 Leu Lys Leu
2354         115
2357 <210> SEQ ID NO: 28
2358 <211> LENGTH: 516
E--> 2359 <212> TYPE: cDNA
2360 <213> ORGANISM: Neurospora crassa
2362 <400> SEQUENCE: 28
E--> 2363 ggtggcgaag acgannggcgg aagttggagg ctaacgagaa tgacnctcgg agatggatct 60
E--> 2364 accctctaga gacacgacta cnnttgcacc cagcctcaag gtntacngtt tntatgggta 120
2365 ggaagccgac ggagcgagcc tacatctatc tggcgcccga tcccgggacg acaacgcatc 180
E--> 2366 tttagatgac gatcgatacg actttgactn aggggcacat tgaccacggt gtgattttgg 240
2367 gcgaaggcga tggcacagtg aaccttatga gtttggggta cctgtgcaat aaggggtgga 300
2368 aaatgaagag atacaatcct gcgggctcaa aaataaccgt ggtcgagatg ccgcatgaac 360
2369 cagaacggtt caatccgaga ggagggccga atacggcgga cttaaatatg tagaaaaggt 420
2370 tgaaatttat gaagagtaat taaatacggc acataggtta ctcaatagta tgactaatta 480
2371 aaaaaaaatt ttttttctaa aaaaaaaaaa aaaaaa                          516
2374 <210> SEQ ID NO: 29
2375 <211> LENGTH: 1562
E--> 2376 <212> TYPE: genomic DNA
2377 <213> ORGANISM: Arabidopsis thaliana
2379 <400> SEQUENCE: 29
2380 atgaaaaaaa tatcttcaca ttattcggta gtcatagcga tactcgttgt ggtgacgatg 60
2381 acctcgatgt gtcaagctgt gggtagcaac gtgtaccctt tgattctggt tccaggaaac 120
2382 ggaggtaacc agctagaggt acggctggac agagaataca agccaagtag tgtctggtgt 180
2383 agcagctggt tatatccgat tcataagaag agtggtggat ggtttaggct atggttcgat 240
2384 gcagcagtgt tattgtctcc cttcaccagg tgcttcagcg atcgaatgat gttgtactat 300
2385 gaccctgatt tggatgatta ccaaaatgct cctggtgtcc aaacccgggt tcctcatttc 360
2386 ggttcgacca aatcacttct atacctcgac cctcgtctcc ggttagtact ttccaagata 420
2387 tatcattttg ggacatttgc ataatgaaca aaatagacat aaatttgggg gattattgtt 480
2388 atatcaatat ccatttatat gctagtcggt aatgtgagtg ttatgttagt atagttaatg 540
2389 tgagtgttat gtgattttcc attttaaatg aagctagaaa gttgtcgttt aataatgttg 600
2390 ctatgtcatg agaattataa ggacactatg taaatgtagc ttaataataa ggtttgattt 660
2391 gcagagatgc cacatcttac atggaacatt tggtgaaagc tctagagaaa aaatgcgggt 720
2392 atgttaacga ccaaaccatc ctaggagctc catatgattt caggtacggc ctggctgctt 780
2393 cgggccaccc gtcccgtgta gcctcacagt tcctacaaga cctcaaacaa ttggtggaaa 840
2394 aaactagcag cgagaacgaa ggaaagccag tgatactcct ctcccatagc ctaggaggac 900
2395 ttttcgtcct ccatttcctc aaccgtacca ccccttcatg gcgccgcaag tacatcaaac 960
2396 actttgttgc actcgctgcg ccatggggtg ggacgatctc tcagatgaag acatttgctt 1020
2397 ctggcaacac actcggtgtc cctttagtta acccctttgct ggtcagacgg catcagagga 1080
```

Same Error

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Same Error

RAW SEQUENCE LISTING DATE: 11/18/2005
PATENT APPLICATION: **US/09/937,779A** TIME: 10:08:48

Input Set : **N:\RJAVED\09937779.txt**
Output Set: **N:\CRF4\11182005\I937779A.raw**

2398 cctccgagag taaccaatgg ctacttccat ctaccaaagt gtttcacgac agaactaaac 1140
2399 cgcttgtcgt aactccccag gttaactaca cagcttacga gatggatcgg ttttttgcag 1200
2400 acattggatt ctcacaagga gttgtgcctt acaagacaag agtgttgcct ttaacagagg 1260
2401 agctgatgac tccgggagtg ccagtcactt gcatatatgg gagaggagtt gatacaccgg 1320
2402 aggttttgat gtatggaaaa ggaggattcg ataagcaacc agagattaag tatggagatg 1380
2403 gagatgggac ggttaatttg gcgagcttag cagctttgaa agtcgatagc ttgaacaccg 1440
2404 tagagattga tggagtttcg catacatcta tacttaaaga cgagatcgca cttaaagaga 1500
2405 ttatgaagca gatttcaatt attaattatg aattagccaa tgttaatgcc gtcaatgaat 1560
2406 ga 1562
2409 <210> SEQ ID NO: 30
2410 <211> LENGTH: 3896
E--> 2411 **<212> TYPE: genomic DNA**
2412 <213> ORGANISM: Arabidopsis thaliana
2414 <400> SEQUENCE: 30
2415 atgggagcga attcgaaatc agtaacggct tccttcaccg tcatcgccgt ttttttcttg 60
2416 atttgcggtg gccgaactgc ggtggaggat gagaccgagt ttcacggcga ctactcgaag 120
2417 ctatcgggta taatcattcc gggatttgcg tcgacgcagc tacgagcgtg gtcgatcctt 180
2418 gactgtccat acactccgtt ggacttcaat ccgctcgacc tcgtatggct agacaccact 240
2419 aaggtccgtg atcttcattt ccttcgctcc ttattctgtc ggtcgagtca cttgttgatg 300
2420 aattccaagc gaaatatagc aatgaagcat gtctcgtctc tcttattgat tcgttcatta 360
2421 gtcaacagtg acgcttctga atctgagttt agagtcatat aaaacagctg actcggcgag 420
2422 tgtttcccat cgcttttggt tcgctaaatg tagcgcaatg aatgtgtaat tagtctgcgc 480
2423 tttttattca actagatctg caagtttttc agagtgctca atagtagtta gaaaatgtta 540
2424 ggtcatttta cttgtgcatt gtgattcttt tggttgttgc ttactgatcg acgtgatgga 600
2425 tggtttacag cttctttctg ctgtcaactg ctggtttaag tgtatggtgc tagatcctta 660
2426 taatcaaaca gaccatcccg agtgtaagtc acggcctgac agtggtcttt cagccatcac 720
2427 agaattggat ccaggttaca taacaggtag tttcggattt ttctttcttt tgagttttct 780
2428 tcaatttgat atcatcttgt tgtgatataa tatggctaag ttcattaatt tggtcaattt 840
2429 tcaggtcctc tttctactgt ctggaaagag tggcttaagt ggtgtgttga gtttggtata 900
2430 gaagcaaatg caattgtcgc tgttccatac gattggagat tgtcaccaac caaattggaa 960
2431 gagcgtgacc tttactttca caagctcaag ttagtcctta tcaggctaat gtcttttatc 1020
2432 ttctcttttt atgtaagata agctaagagc tctggtcgtc ttccttttg caggttgacc 1080
2433 tttgaaactg ctttaaaact ccgtggcggc ccttctatag tatttgccca ttcaatgggt 1140
2434 aataatgtct tcagatactt tctggaatgg ctgaggctag aaattgcacc aaaacattat 1200
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2440 tgaaagtatt acttttgtta attgaactgc tgtacgcgat atggtatctg tagatcttga 1560
2441 agtgctagtt atcaaagaac atattgtggg tagtatacct gtcagcggcc ttagctaata 1620
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2444 tgtgacatat tgacatgcgc ttctcatgtt ttttgttggc aaggcttcag ggaactgctc 1800
2445 ggttgttgtc caattctttt gcgtcgtcat tgtggcttat gccattttca aagaattgca 1860
2446 agggtgataa cacattctgg acgcattttt ctgggggtgc tgcaaagaaa gataagcgcg 1920
2447 tataccactg tgatgaagag gaatatcaat caaaatattc tggctggccg acaaatatta 1980
2448 ttaacattga aattccttcc actagcggtt agactctgta tatgcaactg taacactaac 2040
2449 aaaagtttca ccaagaatgt tcactctcat atttcgttcc tttgatgtgt atccatcagt 2100

Same Error

RAW SEQUENCE LISTING DATE: 11/18/2005
PATENT APPLICATION: **US/09/937,779A** TIME: 10:08:48

Input Set : **N:\RJAVED\09937779.txt**
Output Set: **N:\CRF4\11182005\I937779A.raw**

2450 tacagaaaca gctctagtca acatgaccag catggaatgt ggccttccca ccctttgtc 2160
2451 tttcacagcc cgtgaactag cagatgggac tcttttcaaa gcaatagaag actatgaccc 2220
2452 agatagcaag aggatgttac accagttaaa gaagtacgta cctttctttg tgataagaaa 2280
2453 tattgctcat cgatcatcac ttgctggctt cttgtacgtc aaattgtttt gtttaaatct 2340
2454 ctatatcaat tgttcatatg ctttgtcttt cttactataa gaaacaagta taatcagaaa 2400
2455 ccttattatt gattatcagt tctctcctta tattatggaa tgtcttttc gtttacagtt 2460
2456 atgaatgcaa aaggggtat tttagttgat tgattctctc attctctagt ttgttttgac 2520
2457 taatagcgtc aattttgttt ttctagcaaa tctttgtgaa ttatatataa catgctaact 2580
2458 atacttttca ggttgtatca tgatgaccct gtttttaatc ctctgactcc ttgggagaga 2640
2459 ccacctataa aaaatgtatt ttgcatatat ggtgctcatc taaagacaga ggtatgatgc 2700
2460 attctcaata tcacattatg cgttgacttt gttattatat tccccatttg gtttgcaata 2760
2461 tctttttgaa ttatgattta tcttctccct tgcatcttat gctattaagc gttaaaggta 2820
2462 ctaaatgtat gaagctgtct gtcataggtt ggttattact ttgccccaag tggcaaacct 2880
2463 tatcctgata attggatcat cacggatatc atttatgaaa ctgaaggttc cctcgtgtca 2940
2464 aggtaatttt ccgcaatggc agaagtaaaa caggaaggca aagtcttctg tatcagtcta 3000
2465 gtggcatgtt atctcagttg cataagcaaa ttattaaaca actaaaattt aagtactttt 3060
2466 ttatcattcc ttttgagctt agtggatgat cagtggctta aagtgggaag aggtgttgca 3120
2467 tgaaacatga cacttgtatc aaagataact agcaaaacaa aactaaccca tttctgaatt 3180
2468 tcatattatt aggagtagtc gtgcttttaa aaaatttgtt ttaagaaacc gaaaaactag 3240
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2470 cctataactg gggatgagac ggtaagctca gaagttggtt ttgaaattat cttcttgcaa 3360
2471 actactgaag actaagataa tacttgcttc tggaacactg cttgctatgt tctctagtac 3420
2472 actgcaatat tgactctccg ctacttttat tgattatgaa attgatctct tataggtacc 3480
2473 ctatcattca ctctcttggt gcaagaattg gctcggacct aaagttaaca taacaatggc 3540
2474 tccccaggta ctctttttta gttcctcacc ttatatagat caaactttaa gtgtactttt 3600
2475 ctggttatgt gttgatttac ctccaatttg ttctttctaa aaatcatata tctctgtact 3660
2476 cctcaagaac ttgtattaat ctaaacgaga ttctcattgg gaaaataaaa caacagccag 3720
2477 aacacgatgg aagcgacgta catgtggaac taaatgttga tcatgagcat gggtcagaca 3780
2478 tcatagctaa catgacaaaa gcaccaaggg ttaagtacat aacctttat gaagactctg 3840
2479 agagcattcc ggggaagaga accgcagtct gggagcttga taaaagtggg tattaa 3896
2482 <210> SEQ ID NO: 31
2483 <211> LENGTH: 709
E--> 2484 **<212> TYPE: cDNA** → Same Error
2485 <213> ORGANISM: tomato
2487 <400> SEQUENCE: 31
2488 ctggggccaa aagtgaacat aacaaggaca ccacagtcag agcatgatgt tcagatgtac 60
2489 aagtgcatct aaatatagag catcaacatg gtgaagatat cattcccaat atgacaaagt 120
2490 tacctacaat gaagtacata acctattatg aggattctga aagttttcca gggacaagaa 180
2491 cagcagtttg ggagcttgat aaagcaaatc acaggaacat tgtcagatct ccagctttga 240
2492 tgcgggagct gtggcttgag atgtggcatg atattcatcc tgataaaaag tccaagtttg 300
2493 ttacaaaagg tggtgtctga tcctcactat tttcttctat aaatgtttga gtttgtattg 360
2494 acattgtaag tattgcaaca aaaagcaaag cgtgggcctc tgagggatga ggactgctat 420
2495 tgggattacg ggaaagctcg atgtgcatgg gctgaacatt gtgaatacag gttagaatat 480
2496 tcaaattata ttttgcaaaa tattctcttt ttgtgtattt aggccacctt tccccggtca 540
2497 caacgatgca gatatgtatt cggggatgtt cacctgggac agagttgcag attgaagagt 600
2498 tctacatctc acatcctgtc acactatgtg tgatatttaa gaaactttgt ttggcggaac 660
2499 aacaagtttg cacaaacatt tgaagaagaa agcgaaatga ttcagagag 709
2502 <210> SEQ ID NO: 32
2503 <211> LENGTH: 7

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RAW SEQUENCE LISTING DATE: 11/18/2005
PATENT APPLICATION: **US/09/937,779A** TIME: 10:08:48

Input Set : **N:\RJAVED\09937779.txt**
Output Set: **N:\CRF4\11182005\I937779A.raw**

2504 <212> TYPE: PRT
2505 <213> ORGANISM: Conserved Sequence → Invalid Response. <213> can be either Artificial, Unknown or Genus Species. Pls see Item # 10 on Error Summary Sheet.
E--> 2507 **<400> SEQUENCE:** (7) 32
E--> 2508 **Phe Xaa Lys Trp Val Glu Ala**
2509 1 5 → See page
2517 2/58
2518 BASF-NAE 33 77 / 99 PCT 12.09.2000
E--> 2520 **1**
2522 1/58
2523 09/937,779 OA July 13, 2005
E--> 2524 **Dalquist et al.**

Pls delete.

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 11/18/2005
PATENT APPLICATION: **US/09/937,779A** TIME: 10:08:49

Input Set : **N:\RJAVED\09937779.txt**
Output Set: **N:\CRF4\11182005\I937779A.raw**

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 1

VARIABLE LOCATION SUMMARY DATE: 11/18/2005
PATENT APPLICATION: US/09/937,779A TIME: 10:08:49

Input Set : N:\RJAVED\09937779.txt
Output Set: N:\CRF4\11182005\I937779A.raw

Error Explanation

Use of n's or Xaa's(NEW RULES):
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:5; N Pos. 2363
Seq#:7; N Pos. 601,627
Seq#:9; N Pos. 15,45,83,103,107,112,210
Seq#:25; N Pos. 240,385
Seq#:25; Xaa Pos. 41,89
Seq#:26; N Pos. 601,627
Seq#:28; N Pos. 15,45,83,103,107,112,210
Seq#:32; Xaa Pos. 2

VERIFICATION SUMMARY DATE: 11/18/2005
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Input Set : **N:\RJAVED\09937779.txt**
Output Set: **N:\CRF4\11182005\I937779A.raw**

L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:28 M:283 W: Missing Blank Line separator, <220> field identifier
L:337 M:310 E: (3) Wrong or Missing Sequence Type, numeric identifier <212>, for SEQ ID#:3
L:384 M:310 E: (3) Wrong or Missing Sequence Type, numeric identifier <212>, for SEQ ID#:4
L:454 M:310 E: (3) Wrong or Missing Sequence Type, numeric identifier <212>, for SEQ ID#:5
L:497 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:5
L:639 M:310 E: (3) Wrong or Missing Sequence Type, numeric identifier <212>, for SEQ ID#:7
L:685 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:7
L:685 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:552
L:687 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:612
L:718 M:310 E: (3) Wrong or Missing Sequence Type, numeric identifier <212>, for SEQ ID#:9
L:722 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:9
L:723 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:9
L:725 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:9
L:737 M:310 E: (3) Wrong or Missing Sequence Type, numeric identifier <212>, for SEQ ID#:10
L:772 M:310 E: (3) Wrong or Missing Sequence Type, numeric identifier <212>, for SEQ ID#:11
L:845 M:310 E: (3) Wrong or Missing Sequence Type, numeric identifier <212>, for SEQ ID#:12
L:2125 M:310 E: (3) Wrong or Missing Sequence Type, numeric identifier <212>, for SEQ ID#:23
L:2172 M:310 E: (3) Wrong or Missing Sequence Type, numeric identifier <212>, for SEQ ID#:24
L:2242 M:310 E: (3) Wrong or Missing Sequence Type, numeric identifier <212>, for SEQ ID#:25
L:2262 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:25
L:2262 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:215
L:2263 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:263
L:2274 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:359
L:2275 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:402
L:2281 M:310 E: (3) Wrong or Missing Sequence Type, numeric identifier <212>, for SEQ ID#:26
L:2328 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:26
L:2328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:552
L:2330 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:612
L:2338 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:27 differs:30
L:2359 M:310 E: (3) Wrong or Missing Sequence Type, numeric identifier <212>, for SEQ ID#:28
L:2363 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:28
L:2364 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:28
L:2366 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:28
L:2376 M:310 E: (3) Wrong or Missing Sequence Type, numeric identifier <212>, for SEQ ID#:29
L:2411 M:310 E: (3) Wrong or Missing Sequence Type, numeric identifier <212>, for SEQ ID#:30
L:2484 M:310 E: (3) Wrong or Missing Sequence Type, numeric identifier <212>, for SEQ ID#:31
L:2507 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:32 differs:7
L:2508 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:7
L:2520 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:7
L:2524 M:333 E: Wrong sequence grouping, Amino acids not in groups!
L:2524 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:3
L:2524 M:252 E: No. of Seq. differs, <211> LENGTH:Input:7 Found:10 SEQ:32